

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,598	03/29/2004	Gerald H. Negley	5308-386 2681	
75	90 10/24/2006		EXAM	INER
Mitchell S. Bi			РНАМ,	LONG
Myers Bigel Sibley & Sajovec, P.A.			ART UNIT	PAPER NUMBER
P.O. Box 37428			AKTONII	FAFER NOMBER
Raleigh, NC 27627			2814	

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/811,598	NEGLEY, GERALD H.	
Office Action Summary	Examiner	Art Unit	
	Long Pham	2814	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
Responsive to communication(s) filed on <u>25 Sec</u> This action is FINAL . 2b)⊠ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro		
Disposition of Claims			
4) ☐ Claim(s) <u>1-34 and 47</u> is/are pending in the app 4a) Of the above claim(s) <u>3-14,16-18,22 and 26</u> 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1, 2, 15, 19-21, 23-25, and 47</u> is/are ref. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	6-34 is/are withdrawn from considerated.	deration. -	
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the drawing(s) be held in abeyance. Set on is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119		•	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive i (PCT Rule 17.2(a)).	ion No ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	

Application/Control Number: 10/811,598

Art Unit: 2814

DETAILED ACTION

New grounds of rejection

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 15, 19, 20-21, 23-25, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wojnarowski et al. (US patent 6,483,196) in combination with Chua et al. (US pub 2004/00722106).

With respect to claim 1, Wojnarowski et al. teach a semiconductor light emitting device comprising (see fig. 12 and related text):

A substrate 46 having a face;

A flexible film (silicone based material) 44; and

A semiconductor light emitting element between the substrate and the flexible film and configured to emit light.

Wojnarowski et al. fail to teach that the flexible film or silicone based material is designed to function as a lens or an optical element.

Chua et al. teach design silicone based material to function as a lens or an optical element over a LED. See [0034].

It would have been obvious to one of <u>ordinary skill</u> in the art of making semiconductor devices to incorporate the teaching of Chua et al. into the device of Wojnarowski et al. because the presence of the lens would provide focus or diffusion emitted light to outside.

With respect to claims 2 and 47, Wojnarowski et al. further teach the face includes a cavity therein, wherein the flexible film extends onto the face beyond the cavity, wherein the semiconductor light emitting element is in the cavity.

Further with respect to claims 2 and 47, Wojnarowski et al. further teach attaching the flexible film 44 into the face of beyond the cavity. See fig. 12 and associated text.

Application/Control Number: 10/811,598

Art Unit: 2814

With respect to claims 15, 19, 20, and 23, Wojnarowski et al. in combination with Chua et al. teach the flexible film includes an optical element and a light emitting element between the substrate and the flexible film and configured to emit light through the optical element but fail to teach forming the flexible film includes a plurality of optical elements and a plurality of light emitting elements between the flexible film and substrate.

However, It would have been obvious to one of <u>ordinary skill</u> in the art of making semiconductor devices to form a plurality of optical elements over the flexible film and a plurality of light emitting elements between the flexible film and substrate to increase device integration density.

Further with respect to claim 19, Wojnarowski et al. further teach the optical elements over the cavity.

With respect to claims 20 and 24, Wojnarowski et al. further teach a phosphor layer 42 on the flexible film between the optical elements and the light emitting elements.

With respect to claims 21 and 25, Wojnarowski et al. in combination with Soules appear to fail to teach using different phosphors for different light emitting elements.

However, the use of different phosphors in light emitting elements to produce different colors or red, blue, and green lights is well-known.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 15, 19-21, 23-25, and 47 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on Mon-Frid, 10am to 5pm.

Application/Control Number: 10/811,598 Page 4

Art Unit: 2814

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Long Æham
Primary Examiner
Art Unit 2814